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ABSTRACT

While computer composition scholars have contributed to the understanding of the integration of Web-based technologies and student responses to such integrations, more and continued research must focus on the composition instructor as critical agent in the Web-based classroom. This research call has been emphasized in the work of Cynthia Selfe and Gail Hawisher (1991), as they argue for educating both students and instructors to be critical users, producers, and critics of technology. This paper explores what it means to be a critical Web-based teacher. In particular, the paper explores how certain cultural narratives about the World Wide Web position instructors and students in the Web-based classroom. It discusses possible ways of developing critical Web-based teacher training to offer more support to instructors wanting to enact critical Web-based teaching. It focuses first on both a relationship with two participant instructors for the course "Computer Composition Mentoring" and the methodological framework that mediated that relationship and then attends to the specifics of the data. (Contains 49 references, 7 notes, and 2 figures.) (NKA)

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Technology Programs or The Technologically Programmed? Hopes of Ending Decontextualized Techno Training

By Amy C. Kimme Hea

Paper presented at the Annual Conference on College Composition and Communication (53rd, Chicago, IL, March 20-23, 2002)

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CS 510 946

Technology Programs or The Technologically Programmed? Hopes of Ending Decontextualized TechnoTraining

Web-based teaching is becoming an increasingly common practice for computer composition instructors. Many of us design and publish our own web documents and ask students to work through whole class or personal home pages. Some of us use the Web for email correspondence and chat space and MOO discussions. And still others of us encourage students to use the Web for research as a means to access library sources or to locate online materials. While computer composition scholars have contributed to our understanding of the integration of web-based technologies and student responses to such integrations[2], more and continued research must focus on the composition instructor as critical agent in the web-based classroom. This research call has been emphasized in the work of Cynthia Selfe and Gail Hawisher (1991) and Cynthia Selfe (1999b) as they argue to educate both students and instructors to be critical users, producers, and critics of technology.

In this talk, I want to explore what it means to be a critical web-based teacher. In particular, I want to explore how certain cultural narratives about the WWW position instructors and students in the web-based classroom. To do so, I will talk about my own research with two of three participant instructors who were teaching from a critical standpoint in the web-based classroom. Then, I will discuss possible ways of developing critical web-based teacher training to offer more support to instructors wanting to enact critical web-based teaching.

Before I attend to the specifics of my data, I want to focus on both my relationship with the participant instructors and the methodological framework that mediated that relationship.

Researcher Position

As co-mentors of computers and composition at Purdue University, my colleague Melinda Turnley and I taught a graduate-level, one-credit hour course, English 502I: Computer Composition Mentoring, which included pre-semester and weekly mentor meetings concurrent with the instructors' new roles as computer compositionists. During the fall '99 semester when I conducted this study, I continued to mentor, but I did not assign grades for the course. After explaining my study and role in the mentoring, three instructors in the course that semester generously agreed to work with me. Due to time constraints, however, my presentation today will feature only two of the three instructors. They are represented in my talk under their self-selected pseudonyms of Kris and Elizabeth. For those interested, I would be happy to discuss the other participant, Sam, in the question and answer period.

Methodological Framework

Because I wanted to explore the connections among the cultural discourses and practices that shape our understanding of the WWW, I also needed to develop a research design that is both critical and flexible. Critical technology theorists assert that technology is more than simply a neutral tool that is universally adaptable to our needs. Rather, technology has historical and cultural significance which is constructed through and by our cultural definitions of "acceptable" uses of technology[3]. In addition to this critical position, I also realized that I must not only offer insight into the cultural

[1] Gillette, 1999; Heba, 1997; O'Sullivan, 1999; Watkins, 1996
[2] DeWitt, 1997; Pagnucci & Mauriello, 1999; Takayoshi, Huot & Huot, 1999; Schneider & Germann, 1999
[3] Feenberg, 1991, 1995a, 1995b, 1999; Haraway, 1985, 1995, 1997; Latour, 1992, 1993

implications of my data but do so knowing that those sources—web pages that help to structure my own and instructor participant experiences—could have been, and in some cases were, taken down, completely revised, or moved to a new location. To meet these challenges and still work through the complex layers of my own project, I turned to articulation theory.

With its history in the critical tradition, articulation theory requires its practioners to acknowledge the dynamic, multiple, and contingent nature of all power relations[4]. To understand the complexity of power relations, Stuart Hall (1985) calls for "double articulation" or as his definition posits, the acknowledgement that "structure can also be understood, from another point of view, as simply the result of previous practices" (p. 95). In other words, looking at the "normalized" ways we incorporate the WWW into our classrooms can help us uncover underlying expectations and values associated with the roles of web-based technology, literacy, student-student and student-instructor relationships. Moreover, by identifying and complicating how our experiences with the Web are related to constructions of gender, class, race, ethnicity, religion, age, and sexuality, we can encourage more equitable practices. In the following research description, I hope to rearticulate teacher positionalities through contextualized teacher training practices

Native, Other, and the Global Village: Instructor Negotiations of the WWW

To begin this articulation, I want to consider Selfe's discussion of the global village in relationship to technology advertisements. Selfe (1999a) explains the ways the global village narrative is revised to include the companion narrative of the "electronic colony" in which "the global village retains its geographical reach, but it becomes a world in which different cultures, different peoples, exist to be discovered, marveled at—in a sense, known and claimed by—those who can design and use technology" (p. 295).

Her explication of these companion narratives is useful in thinking about the web-based classroom experiences of instructors in this study. They too found themselves discussing issues of technology as related to "us" versus "them" categories. The "us" is sometimes defined as those of "us" in web-based classrooms, and "them" is persons not online or disinterested in being online. At other times, however, the instructors find students themselves creating a culture of "us" and "them" within the classroom where the "high tech" students are viewed as "soon-to-be competitors" in the growing global marketplace and their "low tech" peers are constructed as "technological underdogs" trying to catch up. In other classroom moments, technology is represented by the position of white, male, and upwardly mobile professional. This construction leaves women and people of color and of lower class status "behind" in the electronic world. These underrepresented groups are believed to be unable to master the Web and deploy it as it should be deployed—to achieve economic gain and intellectual freedom.

As depicted in the following discussion, despite Kris's and Elizabeth's experiences with such divisions and elisions, they and their students still found themselves largely influenced by and struggling with cultural narratives that claim technology has an inherent value in and of itself and that equal participation with the WWW is guaranteed to all.

[4] Deleuze & Guattari, 1987; Grossberg, 1992; Hall, 1985, 1986, 1989; Laclau, 1977; Laclau & Mouffe, 1985; Slack, 1989, 1996

Kris's Negotiation of the WWW as a Global Village

Kris's course materials and our discussions about his teaching revealed his focus on directly challenging the narrative of the WWW as a global village. Kris mentioned in his first interview with me that the WWW is a "window to culture for cultural critique" (personal interview, 10.5.99).

During my first classroom visit to Kris's course, I watched him carefully lead students through a series of readings and web sites related to the idea of the Web as a global village. During the first part of class, students developed definitions of the "global village" for persons who might not understand the metaphor.

The list of student definitions of the global village included the following:

1. The world viewed as a community in which distance and isolation have been dramatically reduced by electronic media.
2. The world as a small community.
3. A collection of individuals around the world linked through common communication media.
4. The global village is a place where people communicate on common topics anywhere in the world. Where the place they meet doesn't exist in the real world but is a fictitious place created by the users.
5. The global village is a view of the world in which all people are in constant communication and can discuss issues pertaining to the whole world. (class observation, 8.22.99)

Kris and his students discussed these definitions by relating them both to a cartoon which depicts the "Information Superhighway" as an entrance ramp to the interstate labeled "Global Village" with two shadowed figures under the highway as one explains that "I didn't have the training and I couldn't afford the computer; software and modem..." and to a web site which contains "world-o-meters" that calculate statistics on birth rate, death rate, and other global factors (See Figure 1).

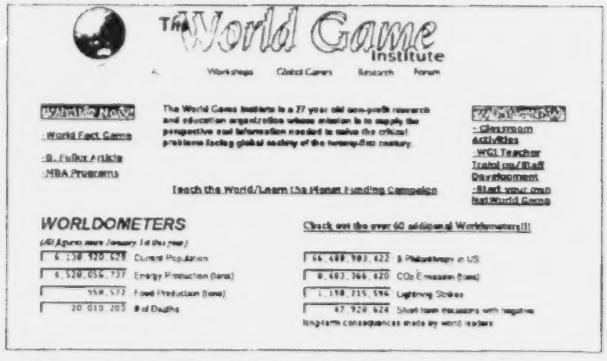

Figure 1: The World Game Institute's Worldometers

Kris posed two questions for student consideration:

1) Is the depiction in the cartoon an accurate one?

2) Why does such a web page exist? (class observation, 8.22.99)

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It was easy to see that Kris was attempting to complicate their definitions and provide other material to challenge the contradictions inherent in the "global village" metaphor.

As the discussion unfolded, however, Kris found that student responses to his questions and concerns were reduced to less subtle discussions about "have" or "have not." This binary was expressed in student comments that ranged from "the image is *just* a joke" to "some people choose to be stuck under the bridge like Aboriginal peoples. Their world suits them just fine. They don't need what we have anyway." Kris asked students to consider the oxymoron of the global village but discovered that for students—whose access to the WWW is ensured, particularly by its physical presence in their daily lives—technology access is defined by the physical presence of hardware, software, and networks. They were not compelled to explore more subtle connections among access and race, class, ethnicity, gender, sexuality, or age

In fact, when ethnicity came up in the discussion, it was defined in rather stereotypical ways, such as in one student's comment that "we [members of this class] don't need to talk about Africa or Australia," assuming that these entire *continents* do not have access to the Internet or WWW and do not necessarily need it either. For the most vocal students, technology access was reserved for those who employ it for economic and social gain. Their determinism played out in their comments about the cartoon and the web page. Their definitions, which Kris diligently attempted to complicate, went unchallenged since many students could only see the benefits of technology, the WWW, and Internet in their daily lives, and even those students who were sensitive to the technology disparities saw the technologies as an either-or proposition—either you have access or you do not.

As Charles Moran (1998) argues in his self-study, "the presence of computers in a writing classroom does make a difference, that technologies are not transparent, and that the change in moving from a traditional classroom to a computer classroom (or back!), is substantial..." (9). Kris and the other instructors in my study echo these sentiments as they wrangled with the practical/theoretical split and with their desires to complicate the web-based technologies at the same time they were employing those technologies in their teaching practices.

Elizabeth's Negotiation of the WWW as a Global Village

The metaphor of the WWW as a global village was prevalent in Elizabeth's class as well. Much like Kris's pedagogical focus on technology as a resource and topic for critique, Elizabeth created a pedagogy that sought to complicate constructions of online communities. In her first interview with me, she explained that

> my students use the Web to work with online communities. Most of them chose online communities whether they were chatrooms or web message boards or Usenet. They also tend to use the Web to do their research. (personal interview, 10.5.99)

Elizabeth encouraged student exploration of the idea of community by developing two projects related to online, web-based communities. The first assignment was described on her web page as "exploring and explaining an online community" and the second as "evaluating an online community" (course web page, 1999). These assignments asked students to "explore how your online community both comes to share language and create knowledge (course web page, 1999). Both of these essay assignments required students to familiarize themselves with a chatroom, MOO, Usenet group, or newsgroup of some kind. In her development of the assignments, Elizabeth

carefully constructed the web-based technologies as "social" technologies—ones that reflect human interactions and understandings.

Her commitment to critical interactions with these online communities, however, was all but thwarted, as were Kris's, by "global" constructions of web-based interactions. Students exploring these communities assumed the status of "observer" often as it is defined in more scientistic research models. Elizabeth's suggestion that students could "lurk" was misconstrued as an invitation to "see" the participants in the online space as "others." This sense of division allowed students to take on positionalities that ignored certain connections between the online community members and themselves. In terms of technical expertise, students who had *not* been a member of the online group that they were studying prior to the assignments were also more likely *not* to have been members of any online community before the course. Thus, students were invested in "seeing" the differences between themselves and their participants as a difference in technological expertise—the participants had the "high tech" skills and language to reflect their membership in the group, and the students did not.

In discussing student responses to the online communities assignments, Elizabeth expressed her own sense of frustration that

> students seem to take it [the Web] for granted—it is what it is. When I ask them to think about the Web and what happens there, they assume that it is "just the way it is." (personal interview, 12.13.99)

This lack of critical awareness created a space where students wrote the "other" into their projects. At once, the online communities were "other" and rationalized as part of the WWW phenomenon of the global village. In my estimation, and Elizabeth's as well, students could "other" the participants in the online communities because the WWW is the totalizing and equalizing factor across the different groups being studied.

Despite Elizabeth's desire to develop students' critical thinking about online communities, students subverted more complex constructions of online spaces by interpreting their experiences through cultural narratives of the WWW. For example, rather than complicating the ideas of gender represented by the "women's Web" and web sites like i-village.com and www.women.com (See Figure 2)—where "modern" women can swap recipes, get career advice, and exchange stories about children and spouses as well as log into discussion groups on soap operas and astrology—students rationalized these uses of the Web through the narrative of inclusion developed by the global village stories. Such inclusion stories of the Web disregard broader and more significant concerns about the "norming" of the Web and offer instead the idea that the Web is a space for everyone, even women. Without questioning why women need their own "Web for women," this marking of "women's" needs as "specialized" implies that the rest of the Web, the more neutral Web,

Figure 2. iVillage.com Starting Node

is by default a "Web for men." Students did not necessarily question the need for such web sites or by contrast, what a "non-specialized," "neutral" web site might be like. Ultimately, those specialized web-based communities can help to rationalize the idea that the WWW does offer something for everyone as if equality is comparable to equity.

Elizabeth expressed the same sentiments as Kris in terms of her own goals of creating critical spaces for critiques of technology in her classroom, and her need to help students learn the technologies so that they can participate in the course. The students, themselves, whether technology experts or novices, were compelled,, however to make the most of the small class size and attention provided by their instructors and learn more about technologies—WWW, email, chatspaces, word processing, etc.—as tools. This instrumentalist view is rationalized by their belief that these skills will set them apart from their "low tech" peers.

Re-articulating the E-dentity of the Computer Composition Instructor through Contextualized Teacher Training

Based upon my own experiences in this study and developing teacher training, I better understand the challenge to build teacher training practices that as Selfe argues are informed by social, cultural, and economic inquiries. In her approach, technology learning is cast not as developing a set of skills but rather as contextualizing technologies and developing training that speaks to that contextualization. While necessary and useful to learn technological skills and their pedagogical application, I also believe a more contextualized approach to web-based teaching would have offered instructors in this study the means to challenge narratives of the WWW. Thus, I propose three ways of rearticulating more complex positionalities for instructors teaching in the web-based classroom. Those ways include historical inquiry, ideological inquiry, and resistant material instantiations of technology.

Historical inquiry into web-based technologies is one means of contextualizing the WWW. Rather than seeing ourselves as subject to the demands of the web-based classroom and finding ourselves "choosing" between teaching a critical approach versus teaching a technological skill, instructors as critical agents can define and redefine the boundaries of WWW use through sustained historical

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inquiry on the integration of technology into their intellectual and pedagogical lives. Historical inquiry is both a personal historicizing of WWW use and a historicization of the development of certain web-based technologies. As instructors explicitly map out histories of their web-based pedagogical practices, they reveal ways of intervening in their technological instantiations. These mappings can take a variety of forms from reflective essays and web pages to visual maps outlining certain practices, but they must be shared and exchanged with a community of practioners. Already recommended to help students develop critical technological literacy[5], this dual form of history making can help us as instructors reveal the tensions between meeting certain professional and pedagogical goals while at the same time offering critical frameworks for technological engagement.

In addition to sharing historical inquiries as part of teacher training, ideological inquiry can help us develop critical agency. While historical inquiry is recording changes to pedagogical and technological instantiations across time, ideological inquiry as a part of teacher training can help to open up questions about how and why a certain pedagogical and technological experience occurs as it does and what the consequences of such an experience are for those involved. Rather than assuming that the technological and pedagogical circumstances are always in line with one another, instructors consider the larger cultural meanings imbricated in their uses of web-based technologies, and how those technologies, in turn, influence pedagogical possibilities. Getting at the ideological implications of web-based materials can allow instructors to develop a more complex way of approaching the incorporation of web-based technologies in their classrooms and raise issues that otherwise might remain unexplored.

To further contextualize teaching practices, historical and ideological inquiries can be complemented by resistant material instantiations of technology. These resistant material instantiations reassert the technological context as primary in determining possible uses for that technology. In other words, the environment, persons, and situations affect the technological integration rather than placing primary emphasis on the technology itself. While these acts may be small in scope, their impact can be far reaching in terms of the learning opportunities offered to instructors and students. Thus, in the move to develop critical agency, we instructors need a better awareness of the underlying logics of the web-based technology. This sort of understanding can be developed in a variety of ways, but one strategy is learning the web-based skills and critiquing those skills as they are being learned rather than after.

Lastly, contextualized teacher training needs to respond to the needs of instructors within their local contexts. The local situation of a particular institution might mean that certain teaching constraints in terms of resources and respect need to be taken into account in the development or revision of teacher training. In terms of resources, instructors might find themselves working with outdated technological systems[6], and in terms of respect, instructors might be subjected to attitudes that technological work is merely about skill rather than intellectual development[7]. Working within and sometimes against the structures of a particular system is among the greatest challenges of critical computer compositionists.

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[5] Blakely Duffelmeyer, 2000; Takayoshi, 1996

[6] For an insightful discussion of this challenge and their response to it, see Hartley, Schendel & Neal, 1999

[7] See Day, 2000; Gruber, 2000; Rickly, 2000 for a startling look at this situation.

Decontextualized and reductive views on the WWW and its role in our classrooms can leave instructors and students with little opportunity to critically engage and even potentially shift the ways that web-based technologies limit our positionalities. Striving to contextualize web-based technology can lead to a renegotiated space in the electronic classroom, a space where more equitable relationships can be established and nurtured. Through historical inquiry, ideological inquiry, and resistant material instantiations, we computer compositionists can develop more complex understandings than those offered by cultural narratives of technology. With a commitment to such praxis, computer compositionists can rearticulate our positions as ones marked by possibility for critique and change.

Biographical Information

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